EXHIBIT 300-01

EQUATIONS USED FOR PROCESS OF
OBTAINING PROJECT DATUM FACTOR

THE RECOMMENDED METHOD OF DETERMINING POSITIONS ON THE PROJECT DATUM (FOR LOCALIZED AREAS WHERE AVERAGE ELEVATIONS AND AVERAGE SCALE FACTORS CAN BE USED WITHOUT A SIGNIFICANT LOSS OF ACCURACY IN MODELING THE ENTIRE PROJECT'S PLANE PROJECTION) IS AS FOLLOWS:

- DETERMINE THE TRUE KENTUCKY STATE PLANE POSITION OF EACH PROJECT CONTROL POINT.

- DETERMINE THE PROJECT SCALE FACTOR (SF) FROM THE <u>MOST CENTRALIZED</u> CONTROL POINT FOR THE PROJECT. THIS IS TO BE A PERMANENT CONTROL POINT (I.E. CONCRETE).

- DETERMINE THE PROJECT ELEVATION FACTOR (EF) FROM AN AVERAGE ELEVATION OF ALL CONTROL POINTS USED ON THE PROJECT.

- FROM THE SCALE FACTOR AND ELEVATION FACTOR, DETERMINE THE COMBINED FACTOR:
  CF = (SF x EF).

- CALCULATE THE PROJECT DATUM FACTOR AS THE RECIPROCAL OF THE COMBINED FACTOR:
  PDF = (1 /CF) -- THIS FACTOR WILL BE USED TO SCALE OR STRETCH THE MAPPING TO THE PROJECT DATUM.

- HOLDING O.O,O.O FIXED, MOVE OR SHIFT EACH CONTROL POSITION FROM STATE PLANE TO PROJECT DATUM.

- PROVIDE BOTH THE KENTUCKY STATE PLANE COORDINATE POSITION AND THE PROJECT DATUM POSITION FOR EACH POINT USED AS PROJECT CONTROL.

MATHEMATICALLY, THE SHIFT FOR EACH INDIVIDUAL POINT COULD BE REPRESENTED BY THE FOLLOWING EQUATIONS:

NPD = [NO + (NSP – NO)] * PDF
EPD = [EO + (ESP – EO)] * PDF

SINCE NO AND EO ARE O.O, THE EQUATIONS SIMPLIFY TO:
NPD = NSP * PDF
EPD = ESP * PDF

WHERE:
NPD = NORTHING ON PROJECT DATUM
EPD = EASTING ON PROJECT DATUM
NSP = NORTHING ON A STATE PLANE PROJECTION
ESP = EASTING ON A STATE PLANE PROJECTION
NO = NORTHING ON HELD POINT
EO = EASTING ON HELD POINT
PDF = PROJECT DATUM FACTOR (THE RECIPROCAL OF THE COMBINED FACTOR)